MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2019/2020

PCA 0016 – COMPUTER APPLICATIONS AND PROGRAMMING

(Foundation in Engineering)

28 FEBRUARY 2020
3.00 p.m. – 5.00 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 3 pages excluding the cover page with **FIVE** questions only.

2. Attempt **ALL** questions. Distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

Answer **ALL** questions.

Question 1: [20 marks]

a) Computers offer us many advantages in today's hectic world. A responsible computer user should be aware of both the advantages and the disadvantages of its use. Identify FOUR advantages and FOUR disadvantages of computer's use. [8 marks]

b) Mainframe and supercomputer are two categories of computer. Briefly explain what are they and give an example in which area are these computers being used? [4 marks]

c) Multimedia is the use of a computer to present and combine multimedia components with links and tools that let the user navigate, interact, create, and communicate. List down the FIVE (5) multimedia components. [5 marks]

d) What is a multimedia authoring software? Give TWO (2) examples of commonly used multimedia authoring software. [3 marks]

Question 2: [20 marks]

a) i) What is a pointing device and what is a pointer? [2 marks]

ii) List FOUR (4) examples of pointing devices. [4 marks]

b) Explain briefly the TWO (2) factors that affect the quality of photos taken with a digital camera. [2 marks]

c) Define impact and nonimpact printers. List down THREE (3) examples of these two types of printers. [8 marks]

d) An audio output device produces music, speech, or other sounds from a computer. List FOUR (4) activities that computer users will need to use a pair of speaker attached to their computer. [4 marks]

Continued...

Question 3: [20 marks]

a) Briefly explain FIVE functions of an operating system installed on computers. [10 marks]

b) What is the purpose of the following utility software:
   i. Disc burning software
   ii. Disk defragmenter

[4 marks]

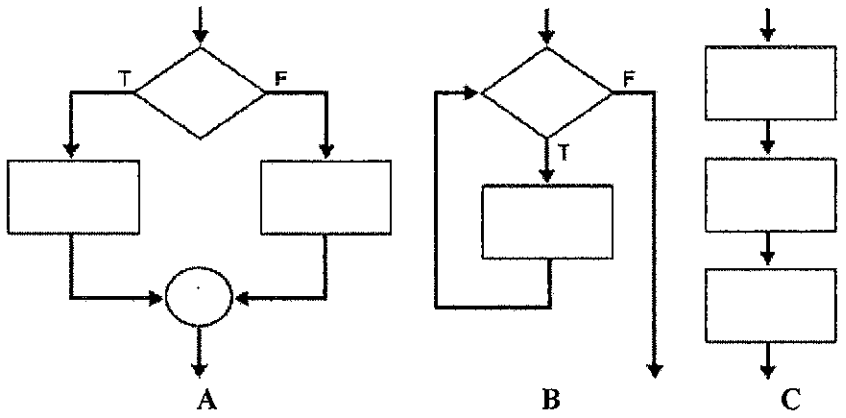
c) Application software are available in a variety of forms. Briefly explain the following form of application software and give an example of each form. [6 marks]

   i. Packaged software
   ii. Freeware

Question 4: [20 marks]

a) What are the two categories of programming languages? Give TWO (2) examples for each category. [4 marks]

b) i) Label the three control structures given in the diagram below. [3 marks]



c) Write a program (code segment) in Visual Basic to fill a list box with either odd or even numbers from 1 to 10 based on selection made on a combo box with options of *Even* and *Odd*. The selection is done on a combo box named *cboEvenOdd* and the output is displayed in a list box named *lstOutput*. Refer to **Figure Q4** on the next page. [13 marks]

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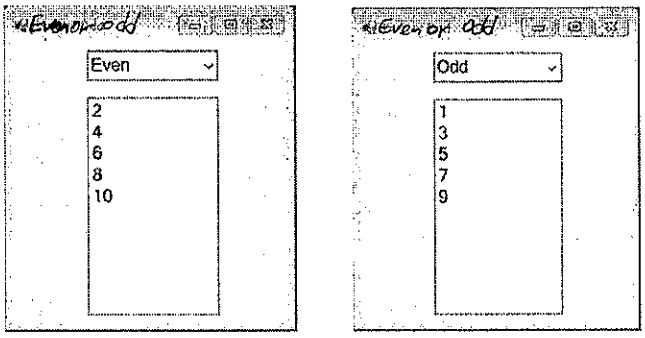

Figure Q4

Question 5: [20 marks]

a) i) What is a computer network? [2 marks]
ii) List down FOUR (4) advantages of using a computer network. [4 marks]

b) Briefly explain the following network communication standards:
i) Bluetooth.
ii) Radio Frequency Identification (RFID).
[4 marks]

c) List down and briefly explain any FIVE different wireless transmission media used in communication. [10 marks]

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